



INCIDENT AND COMPLAINT SUMMARIES FOR FOURTH QUARTER 2011*

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*Any complaint and/or incidents involving hospitals on or after August 30, 1999 are not releasable under the Texas Public Information Act & the Health and Safety Code Chapter 241.051(d). These summaries will not appear in this report.

Copies of this report are available on the internet at <http://www.dshs.state.tx.us/radiation/incident.shtm>

**Incident and Complaint Summaries
4th Quarter 2011**

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Incidents Opened Fourth Quarter 2011

I - 8888 - Badge Overexposure - Raba-Kistner Consultants, Inc. - San Antonio, Texas

On October 7, 2011, the Agency was notified by the licensee that one of its employee's dosimetry badge reports for the second quarter of 2011 had a reading of 8,110 mrem. The licensee did not send their second quarter badges for processing until the end of the third quarter. The licensee reported its investigation and conclusion that the employee had not received the exposure. Based on information provided by the licensee during the Agency's investigation, the Agency concurs with the licensee's determination that it was unlikely that the employee received the dose indicated on the badge report. The employee was assigned a dose for the second quarter based on an average of the previous four quarters. No violations were cited.

File closed.

I - 8889 - Nuclear Pharmacy Error - Cardinal Health Nuclear Pharmacy - Dallas, Texas

On October 9, 2011, the Agency was notified by the licensee that a hospital notified the pharmacy that a unit dose ordered to be 25 millicuries was assayed at 49 millicuries of technetium-99m. The licensee conducted an investigation into the event and found that the individual preparing the unit dose had taken the contents of a bulk dose and placed it in the unit dose vial. They were not able to get enough material from the bulk dose vial, so the individual got the needed additional material for a second vial and assumed it was the same concentration as the first. It was not. The individual preparing the unit dose also used the wrong calibration time when the sample was assayed prior to shipment. The hospital prepared a unit dose for the patient using the dose delivered by using a smaller volume than originally calculated. Per the licensee, all employees were counseled on the use of procedures for preparing unit dosages and the event will be discussed in a future staff meeting. No violations were issued.

File closed.

I - 8890 – Radiography Equipment Failure - METCO - Houston, Texas

On October 11, 2011, the Agency was notified by the licensee that on October 10, 2011, while performing radiography operations in a shooting bays, the radiographer was unable to retract an 89 curie iridium-192 source into a Spec model 150 camera. The licensee used their video surveillance cameras to verify that nothing had fallen on the guide tube to prevent movement of the source. No obstructions were observed. A technician approved for source retrieval inspected the camera and associated equipment and determined that the crankout being used was not working correctly. The crankout was disassembled and the drive cable was pulled by hand until the source returned to the fully shielded and locked position. The licensee inspected the crankout device and found that there was a slight misalignment between the drive cable and the gear. The device was adjusted, tested and operated smoothly. The crankout device was sent to the manufacturer for further evaluation. The manufacturer stated that the gears in the device were worn and that the device should be removed from service. No violations were cited.

File closed.

Incidents Opened Fourth Quarter 2011

I - 8891 - Stolen Radiation Generating Device - Turbo Non-Destructive Testing, Inc. - Houston, TX

On October 10, 2011, a registrant reported to the Agency that a Niton XL3T-800 Series x-ray fluorescence device had been stolen out of the vehicle while the registrant was eating lunch. The vehicle's side window was broken and the device and other items were taken. The local law enforcement was notified. This device model uses an x-ray tube only--there is no radioactive source. The Agency notified the manufacturing company and the device was flagged in the company's records in case it comes in for service or repair. The Agency also provided information about the stolen device to The Texas Association of Pawnbrokers. As of December 19, 2011, the device had not been found. The Agency closed the file but will re-open it if new information or the device surfaces. No violation was cited.

File closed.

I - 8892 - Equipment Malfunction - The University of Texas M. D. Anderson Cancer Center - Houston, Texas

On October 12, 2011, the Agency was notified by the licensee's Radiation Safety Officer (RSO) that there had been a malfunction with the Shepherd Mark 1-68A irradiator, which contains 6300 curies of cesium-137, at the licensee's facility in Houston, Texas. The source was in the fully shielded position and therefore did not present a risk of exposure to any individual. The owner/operator within the facility reported that it was suspected that the compressor failed on October 7th and arrangements were made to get it repaired or replaced. While working to repair the compressor, it was determined that the compressor was not the problem. The licensee was able to open and close the door to the irradiation chamber and apparently all the interlocks functioned as designed, but the source failed to move. On October 12, 2011, it was determined that the source drive mechanism was failing to move the source due to a broken spring. The manufacturer was contacted to repair the broken spring. On October 20, 2011, the manufacturer replaced two springs used to move the source. The manufacturer stated that the springs failed due to normal wear and tear and use. The owner/operator is working with the manufacturer to establish a maintenance program for the device. No violations were cited.

File closed.

Incidents Opened Fourth Quarter 2011

I - 8893 - Damaged Radiography Equipment - Team Industrial Services Inc. - Alvin, Texas

On October 14, 2011, the Agency was notified by the licensee that on October 13, 2011, a radiography team was unable to retract a 32 curie iridium-192 source back into the QSA Global model 880-D exposure device. Industrial radiographic operations were being conducted in a pipe rack approximately 2 feet above ground level. The exposure device was set on a 14" pipe to perform radiography on an adjacent pipe. While the source was fully extended into the collimator, the device moved and then fell off of the pipe, impacting the remote drive mechanism conduit and causing a crimp in the conduit. Because of the crimp, the source could not be retracted. The radiographer was trained and authorized for source retrieval. After notifying his Radiation Safety Officer, the radiographer used a 6-foot rod to move the collimator with the source inside around behind a concrete pillar to reduce exposure. He then approached the device, accessed the control drive cable, and manually pulled the source back into the fully shielded position as he backed away from the device. No member of the general public received any exposure during this event. The radiographer received 20 millirem total for the day on his direct reading dosimeter, 10 millirem attributed to the retrieval. The device and remote drive assembly were sent to the manufacturer for inspection, repair and leak tests. The device was not damaged, the drive assembly was repaired, and all leak tests were negative. The cause of the event was placement of the exposure device that hindered equipment stability. As corrective action, information on the event will be distributed to all of the licensee's locations to be reviewed as a reminder of the importance of stable radiographic configurations and consequences of a failing radiographic setup. No violations were cited.

File closed.

I - 8894 - Overexposure - PetroChem Inspection Services Inc. - Pasadena, Texas

On October 17, 2011, the Agency was notified by a licensee that a radiographer had climbed a ladder to remove the guide tube from a QSA Model 880 radiography camera containing a 49.3 curie iridium-192 source that was suspended by a rope. As he was trying to disconnect the guide tube, another employee observed the radiographer's survey meter was indicating that the camera's source was not in the shielded position. The radiographer climbed down the ladder and cranked the source back into the camera. The radiographer's badge was sent for processing and the badge total effective dose equivalent reading of 4,192 mrem. The radiographer was unable to ascertain where the source had been in the guide tube. The whole body dose from the incident caused the radiographer to exceed the annual occupational dose limit of 5,000 mrem. The licensee conducted reenactments of the event to determine the exposure to the radiographer's hands. The final dose estimate to his hands was 58.15 rem for the event exceeding the shallow dose equivalent limit for the year. The licensee removed the radiographer from any duties that would expose him to any additional radiation and provided additional training for him. The licensee and radiographer were cited for violations.

File closed.

Incidents Opened Fourth Quarter 2011

I - 8895 - Gauge Shutter Failure - Ticona Polymers, Inc - Bishop, Texas

On October 13, 2011, the licensee reported to the Agency that the shutter handle of a Berthold nuclear gauge containing 20 millicuries of cesium-137 had broken off flush with the housing. The gauge shutter was in the open position, which is the normal operating position of the gauge. A service provider was contacted and on October 27th the gauge shielding and shutter were replaced. The cause for the failure was determined to be a build up of rust and corrosion products in the gauge preventing the operating arm from moving. The force used in attempting to close the shutter was enough to snap the handle. There was no risk of additional exposure to plant personnel or members of the general public because of this event. The licensee has provided additional instructions to their workforce on the proper testing and inspection of these devices. No violations were cited.

File closed.

I - 8896 - Gauge Shutter Failure - All Star Metals LLC - Brownsville, Texas

On November 2, 2011, the Agency was notified by a general licensee that the shutter on a NITON XLP818 nuclear gauge containing 30 millicuries of americium-241 used for metal analysis was stuck in the closed position. The gauge appeared to have suffered an impact that locked the shutter closed. The licensee sent the gauge to the manufacturer who repaired and calibrated the unit. Multiple parts inside the gauge were replaced. The manufacturer reported that the damage was from an impact due to dropping the unit. No violations were cited.

File closed.

I - 8897 - Gauge Shutter Failure - Equistar Chemicals LP - Pasadena, Texas

On November 3, 2011, the Agency was notified by the licensee that the shutter on an Ohmart/ Vega model SH-F1A containing 50 millicuries of cesium-137 failed to close during the required maintenance check performed on November 2, 2011. The gauge shutter was stuck in the open position, which is the normal operating position for the gauge and did not pose an increased exposure risk to any individual. A service provider repaired the gauge shutter on November 29, 2011. The service technician stated a buildup of rust and other particles prevented the gauge shutter from operating correctly. The licensee intends to increase the frequency of maintenance on their older gauges and replace them over a period of time. No violations were cited.

File closed.

Incidents Opened Fourth Quarter 2011

I - 8898 - Gauge Shutter Failure - Equistar Chemicals LP - Pasadena, Texas

On November 3, 2011, the Agency was notified by the licensee that the shutter on an Ohmart/Vega model SH-F2 containing 500 millicuries of cesium-137 failed to close during the required maintenance check performed on November 2, 2011. The gauge shutter was stuck in the open position, which is the normal operating position for the gauge and did not pose an increased exposure risk to any individual. A service provider repaired the gauge shutter on November 29, 2011. The service technician stated a buildup of rust and other particles prevented the gauge shutter from operating correctly. The licensee intends to increase the frequency of maintenance on their older gauges and replace them over a period of time. No violations were cited.

File closed.

I - 8899 - * - Memorial Herman Hospital - Houston, Texas

* Health and Safety Code Chapter 241.051(d)

No violations were cited.

File closed.

I - 8900 - * - Columbia Medical Center of Arlington dba Medical Center of Arlington - Arlington, Texas

* Health and Safety Code Chapter 241.051(d)

No violations were cited.

File closed.

I - 8901 - Equipment Malfunction - The University of Texas M. D. Anderson Cancer Center - Houston, Texas

On November 4, 2011, the Agency was notified by the licensee that the door of its Shepherd calibrator could not be opened. The calibration source functioned as designed. The manufacturer inspected the device on November 16, 2011, and performed maintenance on the door switch and made adjustments to the door mechanism which allowed the door to function properly. The manufacturer stated that the door may not have been operated properly in the past. The licensee has provided additional instruction on the proper operation of the door to all users. No violations were cited.

File closed.

Incidents Opened Fourth Quarter 2011

I - 8902 - * - El Paso Healthcare System LTD - El Paso, Texas

* Health and Safety Code Chapter 241.051(d)

One violation was cited.

File closed.

I - 8903 - Stolen Radioactive Material - Terracon Consultants, Inc. - Dallas, Texas

On November 15, 2011, the Agency was notified by the licensee that a Troxler model 3440 moisture/density gauge containing 9 millicuries of cesium-137 and 40 millicuries of americium-241 was stolen. The gauge was locked in the back of a company truck and the truck was parked at the technician's home overnight. When the technician went to the truck to leave, he found the gauge, one lock, and a chain missing. The licensee notified local law enforcement of the theft. On December 17, 2011, the Agency received the results of the licensee's investigation. The investigation found that at the time of the theft the gauge was secured in the back of a vehicle using only one tangible barrier, instead of two as required by rule, and that the gauge should have been returned to its normal storage location prior to the technician going home. The licensee terminated employment of the technician involved and all of the company's gauge operators operating in the State of Texas received a memo outlining the event, the corrective action taken against the technician, and reminded them of the company's nuclear gauge security procedures. One violation was cited.

File closed.

I - 8904 - Therapy Event - University of Texas M. D. Anderson Cancer Center - Houston, Texas

On November 21, 2011, the Agency was notified by one of its licensees that a therapy event had occurred on November 17, 2011, during an administration of yttrium-90 microspheres. The patient was prescribed a dose of 135 gray to the target tissue. Surveys of the administration equipment following the procedure indicated readings that were higher than expected if the full dose had injected into the patient. An estimated dose of 95.8 gray was administered to the target tissue, an approximate 29% variation from the prescribed dose. No external contamination was found. On December 1, 2011, an inspection of the equipment found no indication of failure and a microcatheter with an appropriate inner diameter was used. The estimated treatment dose fell within the therapeutic range so no additional treatment was needed. No cause for the event could be determined by the licensee as it found that the equipment worked properly and the procedure was followed. The licensee's nuclear medicine staff reviewed the event and developed a time out procedure to verify that the proper equipment is used, the correct dose is administered, and the procedure is completed smoothly. No violations were cited.

File closed.

Incidents Opened Fourth Quarter 2011

I - 8905 - Overexposure - Theda Oaks Gastroenterology & Endoscopy Center LTD - San Antonio, Texas

On November 22, 2011, the registrant notified the Agency that one of its physicians' dosimetry reports for the third quarter of 2011 indicated a year-to-date dose of 5,368 mrem, which exceeded the annual occupational dose limit of 5,000 mrem. The registrant conducted an investigation and took corrective actions based on its findings. It was determined by the registrant that the most likely primary cause was the physician standing too close during lateral patient procedures. Corrective actions enacted by the registrant include having the physician change the way he performs the procedures by moving further away from the beam and correct the placement of his dosimetry from the apron pocket to the neck. In addition, staff was reminded of the importance of being observant and cognizant of exposure during procedures, and meetings are to be held quarterly and as needed to review exposures and procedures. One violation was cited.

File closed.

I - 8906 - Abandoned Well Logging Source Down Hole - Sonic Surveys LTD - Mont Belvieu, Texas

On November 18, 2011, the Agency was notified by the licensee that it had lost, and subsequently abandoned, a logging tool containing a 20 millicurie cobalt-60 sealed source at a depth of approximately 5,100 feet in a well in Matagorda County, Texas. The well is a brine solution well that has been converted for gas storage and is a cavern and not a typical well site. There is no rig on the well and the source is at the bottom of the cavern. There is no danger of rupture or exposure. There are no plans to enter the well or cavern in the near future with tubing or wireline. No further action will be taken to retrieve the tool. A plaque for placement at the well head has been ordered. The sources were abandoned in accordance with Texas Railroad Commission and Agency regulations. No violations were cited.

File closed.

I - 8907 - Therapy Event - Texas Oncology-Edwards Cancer Center - Bedford, Texas

On November 8, 2011, the Agency was notified by a licensee that there had been a therapy event with a linear accelerator in which the wrong patient was treated. The incorrect treatment was delivered to the correct isocenter. The treatment deviation resulted in a mean dose increase of 77 centigray (2.2% of the 3500 centigray total dose). The event occurred because a face photo was not reviewed prior to the patient entering the room. The physicist created a new timeout procedure prior to starting a treatment which includes verifying the face photo, patient information, consent forms, and area of treatment. The therapy staff received inservice training on the incident and timeout procedure. No violations were cited.

File closed.

Incidents Opened Fourth Quarter 2011

I - 8908 - Abandoned Radioactive Material - Lawrence Engineering - Dallas, Texas

On December 2, 2011, the Agency was notified by a facility owner that the licensee had abandoned what appeared to be Troxler Model 3430 moisture/density gauges in the building. Initial investigation revealed that the license had been revoked for non-payment. An investigation into this event is ongoing.

File open.

I - 8909 - Damaged Nuclear Gauges - Pasadena Refining Systems, Inc. - Pasadena, Texas

On December 12, 2011, the Agency was notified by a licensee that on Saturday, December 10, 2011 there had been a fire in the coker unit at their facility in Pasadena, Texas. The RSO reported there were 4 fixed nuclear gauges on 82-foot tall drums in the area of the fire. The gauges were Ohmart/Vega Model SH1G-1, each containing a 300 millicurie cesium-137 source. Two gauges were directly in the fire and were damaged. The other two gauges were shielded from the fire by the drum they were mounted on and it has not yet been determined if they sustained any damage. The area was barricaded to prevent entry due to unsafe conditions caused by the fire (i.e. structural damage that has to be assessed, heat, ash/hydrocarbons). There were no radiation levels above background found during initial surveys from the barricade line and subsequent surveys conducted under the drums on the ground level and second level (areas where people will begin working). Higher levels will be surveyed prior to entry. The licensee has made arrangements with Ohmart/Vega for service to remove all 4 gauges once the area is safe. An investigation into this event is ongoing.

File open.

I - 8910 - Gauge Shutter Failure - Sherwin Alumina LP - Corpus Christi, Texas

On December 14, 2011, the Agency received a report from the licensee that the shutter on a Kay-Ray Model KR7062P fixed density gauge containing a 100 millicurie cesium-137 source had failed in the open position. The gauge shutter is open during operation so the failure did not create an exposure hazard. The licensee contacted the manufacturer to repair or replace the gauge. The investigation into this event is on going.

File open.

I - 8911 - Nuclear Pharmacy Error - Cardinal Health Nuclear Pharmacy - Houston, Texas

On December 8, 2011, the Agency was notified by the licensee that it had receive notification from a hospital that the wrong radiopharmaceutical had been received and administered to a patient. The unit dose was meant for a different hospital in the area. The second hospital was contacted and it confirmed that it had received and administered the wrong radiopharmaceutical to one of its patients. The nuclear pharmacy's investigation determined that the prescription labels were inadvertently separated from the corresponding shield container and the unit doses then placed in the wrong transport container. The licensee counseled all employees involved on the proper packaging procedure. No violations were cited.

File closed.

Incidents Opened Fourth Quarter 2011

I - 8912 - Badge Overexposure - Hi-Tech Testing Service, Inc. - Cotulla, Texas

On December 21, 2011, the Agency was notified by the licensee's Radiation Safety Officer (RSO) that the licensee's November 2011 monthly dosimetry report had indicated that a radiographer trainee had received 7,754 mrem deep dose, whole body, for that month. The RSO's investigation determined that the excessive dose had been to the badge only. It occurred when the badge came off of the radiographer trainee's shirt and fell into a piece of pipe that was being radiographed at a temporary job site in Cotulla, Texas, on November 10, 2011. A portion of the badge was visible in the film from one of the two shots that were performed before the radiographer trainee discovered the badge in the pipe. This, coupled with dose calculations and statements from radiographic personnel involved, supported the RSO's findings. The RSO assigned the radiographer trainee a dose of 354 mrem for the November 2011 reporting period based on his daily dosimeter records. To prevent recurrence, the RSO has instructed all of the licensee's radiographers to contact the licensee's Radiation Safety Department immediately if accidental exposure to a film badge is suspected and not to assume the badge was not exposed. The Agency concurs that the dose was to the badge only. The RSO also reported to the Agency that the radiographer accompanying the trainee had been mistakenly assigned by the licensee's operations staff as a radiographer trainer and the radiographer had been performing the duties of radiographer trainer with trainee above since July 2011. The radiographer trainee was reassigned to a certified radiographer trainer under whom he will repeat his required supervised hours. To prevent recurrence, the RSO instituted a process to ensure operations staff have a current, verified list of approved radiographer trainers and job assignments will be reviewed weekly by the licensee's Radiation Safety Department. One violation was cited.

File closed.

I - 8913 - Therapy Event - Texas Oncology PA at Klabzuba Cancer Center - Forth Worth, Texas

On December 21, 2011, the Agency was notified by the registrant's Radiation Safety Officer that while a physician was reviewing a patient's records prior to a follow-up appointment he discovered that the therapy dose totaling 5,400 centigray delivered in three fractions in November 2011 had been delivered to the wrong site. The patient had two areas of concern within one organ. The smaller of the two had been biopsied and found to be malignant. The second, larger area had not been biopsied. The larger area was treated. The patient's physician stated that the treatment would have no deleterious effect on the patient and that the larger area would probably need to be treated at a later time. The licensee has changed its procedure to require a second method of identifying the correct treatment site prior to treatment. No violations were cited.

File closed.

Incidents Opened Fourth Quarter 2011

I - 8914 - Radiography Source Disconnect - Phoenix Non Destructive Testing - Houston, Texas

On December 22, 2011, the Agency was notified by the licensee that a 32 curie iridium-192 source from a Spec-150 radiography camera had disconnected from its drive cable. The investigation into this event is ongoing.

File open.

I - 8924 - Nuclear Pharmacy Error - Cardinal Health Nuclear Pharmacy Services

On November 17, 2011, the Agency was notified by the licensee that it received a call from a customer stating that a unit dosage of technetium-99m Sestamibi it ordered resulted in a scan presenting primarily bone uptake. Technetium-99m Sestamibi is primarily used as a cardiac viewing agent. One individual was administered this product, however, the patient did not experience any adverse medical reactions or altered biodistributions as a result of the event. The licensee stated that the error occurred because the vial for the technetium-99m Sestamibi was inadvertently placed with the vials to be filled with technetium-99m Medronate. The licensee counseled all employees involved and a staff meeting was held to discuss the event. No violations were cited.

File closed.

Incidents Opened in a Previous Quarter and Closed in Fourth Quarter 2011

I - 8854 - Lost Source of Radioactive Material - FedEx - Houston, Texas

On May 19, 2011, the Agency was notified by a consultant for a shipping company that on May 18, 2011, at 0900 hours a package containing an eight curie iridium-192 source was lost in Houston, Texas. The shipper stated that the door on the back of the truck popped open and the container with the source fell onto the road. A member of the general public (MGP) driving the same direction a few minutes later stopped to pick up envelopes that had fallen out of the truck and saw the package on the other side of the road. He stated that there was too much traffic for him to retrieve it so he went on his way. About an hour later he passed by the area again and noted that the package was gone. The driver of the shipping company's truck discovered that the package was missing when he made his next stop. The driver retraced his path, but only found a bin that had fallen from his truck. The MGP took the envelopes he had found to one of the shipping company's facilities and told them what he had seen. The shipping company made a total of three searches for the package, but did not find it. On May 19, 2011, after being notified, the Agency contacted local hazardous materials team (HazMat) in the area and informed them of the event. Houston HazMat began calling fire stations and located the package at the Aldine Fire Department. The Agency attempted to perform an on-site investigation at the shipping company's facility on May 20, 2011. The shipping company initially agreed to the inspection, but later informed the Agency that it did not believe that the Agency had any jurisdiction and denied access to the facility. On August 10, 2011, the shipping company was informed of the Agency's intentions to obtain a Health Warrant and sent a copy of the Health Warrant to the shipping company's legal counsel. On August 31, 2011, the shipping company agreed to the inspection under the conditions presented by the Agency. On September 7, 2011, the Agency conducted an on-site investigation at the shipping company's facility. The investigation found that the driver failed to recognize that he had loaded a package containing radioactive material into his truck and failed to properly placard the truck and brace and block the package to prevent movement during normal transport. The locking mechanism for the roll up door on the back of the truck was loose which allowed the door to open while the truck was being driven. The package fell out. The shipping company reprimanded the driver and changed its policies at the facility to prevent a recurrence of the event. Three violations were cited.

File closed.

I - 8868 - Therapy Event - North Texas Cancer Center at Wise - Decatur, Texas

On July 7, 2011, the Agency was notified by a cancer center licensee that there had been a therapy event in which a treatment was given to the wrong patient. The event occurred when a technologist had loaded a treatment plan anticipating the arrival of a patient to be treated with an external beam from a linear accelerator. When the patient failed to arrive for treatment, another patient was pushed forward on the schedule but the plan was not changed to the new patient. The treatment lasted less than one minute and delivered a dose of 36.2 centigray to an area of the patient's body that was not part of that patient's treatment plan. The dosimetrist, health physicist, and physician concurred that the radiation delivered to the patient did not pose a health risk or have a measurable effect on the patient. The licensee conducted in-service training with the staff to review the event and the patient identification policy. No violations were cited.

File closed.

Incidents Opened in a Previous Quarter and Closed in Fourth Quarter 2011

I - 8869 - Gauge Shutter Failure - Sherwin Alumina LP - Gregory, Texas

On July 15, 2011, the Agency received an email from the licensee's Radiation Safety Officer (RSO) stating that the shutter on a Kay-Ray model 7062P nuclear gauge containing 100 millicuries of cesium-137 was loose and would not completely shield the source when it was in the closed position. The manufacturer was contacted and the gauge was replaced and disposed by the manufacturer on October 18, 2011. No violations were cited.

File closed.

I - 8870 - Gauge Shutter Failure - Sherwin Alumina LP - Gregory, Texas

On July 15, 2011, the Agency received an email from the licensee's Radiation Safety Officer (RSO) stating that the shutter on a Texas Nuclear model 5176 nuclear gauge containing 500 millicuries cesium (Cs)-137 was stuck in the open position. Open is the normal operating position for this gauge and it did not present an exposure hazard to any individual. The licensee contacted a service provider to repair or replace the gauge. The service provider determined that the gauge was not repairable and disposed of it on October 18, 2011. No violations were cited.

File closed.

I - 8875 - Stolen Radioactive Material - Coastal Testing Laboratories, Inc. - Houston, Texas

On July 26, 2011, the Agency was notified by the licensee that a Humbolt 5001 EZ moisture/density gauge was stolen out of one of its trucks in Houston, Texas. The gauge contained a 40 millicurie americium-241/beryllium source and a 10 millicurie cesium-137 source. The gauge was locked in the back of a pickup truck parked at a training center where the user was attending safety training. When the user returned to the truck, he found the lock and chain securing the gauge had been cut and the transport case with the gauge was missing. The user contacted his employer who then contacted local law enforcement. The Agency's investigation found that the gauge had been secured in the truck using only one barrier instead of two independent barriers as required by rule. The licensee has changed its procedure to require two independent locking devices when the device is not under direct surveillance by the technician. The licensee was cited for one violation.

File closed.

Incidents Opened in a Previous Quarter and Closed in Fourth Quarter 2011

I - 8878 - Gauge Shutter Failure - Zilkha Biomass Crockett Energy LLC - Houston, Texas

On August 17, 2011, the Agency was notified by the licensee that it was unable to open the shutter on a Ronan Engineering model GS 400 nuclear gauge containing 20 millicuries of cesium-137. The gauge had been taken out of service by the licensee to conduct maintenance in the area around the gauge. Once the work was completed, they were unable to open the gauge shutter. The licensee took the gauge out of service until it could be replaced. The gauge did not present an exposure hazard to anyone. The licensee's Radiation Safety Officer stated that the gauge has been opened/closed several times since it was installed. The gauge was replaced by the manufacturer. The manufacturer inspected the gauge and found that a cotter pin had bent preventing the shutter from opening far enough for the detector to see an increase in radiation levels, thus giving a closed indication. No violations were cited.

File closed.

I - 8883 - Medical Event - The University of Texas M. D. Anderson Cancer Center - Houston, Texas

On September 13, 2011, the Agency was notified by the licensee that it had determined that a medical event had occurred at its facility. The licensee reported that on September 9, 2011, a patient had undergone a therapy procedure which involved insertion of yttrium-90 microspheres into the treatment site. The patient's prescribed dose was to be 80 gray. It was determined that the patient had received a dose of 49 gray (22.3 millicuries administered), which is 39% less than the prescribed dose. A thorough examination of the device was completed by the manufacturer and licensee on October 26, 2011. The device showed that the white needle injector assembly had not been fully engaged with the dose vial acrylic shield and that the needles had penetrated the septum at an angle. There were no apparent defects noted with the device or any associated pieces, including the dose vial acrylic shield. Re-assembly of the parts showed that the injector could be properly engaged. Apparently the leakage, which prevented complete delivery of the dose, occurred between the needles and the septum due to the angle of insertion. The root cause was concluded to be that the injector assembly was not properly engaged with the dose vial acrylic shield. The licensee discussed the cause of the event with its personnel that provide this type of therapy. The licensee has made changes to its internal procedure for delivering this therapy to ensure that the injector assembly is properly engaged with the dose vial acrylic shield. No violations were cited.

File closed.

Incidents Opened in a Previous Quarter and Closed in Fourth Quarter 2011

I - 8884 - Overexposure -Weld Spec Inc - Groves, Texas

On September 14, 2011, the Agency was notified by the licensee that a radiographer exceeded the 5 rem occupational dose limit for the year. On September 12, 2011, while operating an INC IR100 camera containing a 67 curie iridium-192 source, the radiographer failed to fully retract the source into the camera. The portable radiation meter was turned off and no radiation pagers alarmed. Both radiographers noted that their 0-200 millirem pocket dosimeters were off scale. They stopped work, fully retracted the source in the camera, and reported the incident to the RSO. Their dosimetry badges were sent off for emergency processing and the results were received on September 14, 2011. The trainer had received 3.31 rem and the trainee had received 2.79 rem. The total exposure for the year for the trainer equaled 5.152 rem and he was removed from duty for 2011. During the investigation it was determined that the trainee had attempted to conduct a survey after cranking in the source but the meter was off for all three shots on the first weld and post use survey. Both radiographers stated they tested their electronic rate meters but the batteries appeared to be weak when tested after the incident. Three violations were cited.

File closed.

I - 8885 - Gauge Shutter Failure - Ticona Polymers, Inc - Bishop, Texas

On September 19, 2011, the Agency was notified by the licensee that the shutter on an Ohmart-Vega SH-F2 nuclear gauge containing a 100 millicurie cesium-137 source had failed in the open position during a routine maintenance inspection check. Open is the normal operating position for the shutter so the gauge did not present a radiological exposure hazard to the public or employees. The gauge was repaired on September 28, 2011. The manufacturer determined that the cause for the failure was bird droppings building up in the area of the operating arm. A protective device has been installed to prevent a recurrence of the failure. No violations were cited.

File closed.

I - 8887 - Gauge Shutter Failure - BASF Corporation - Freeport, Texas

On September 26, 2011, the Agency was notified by the licensee that a shutter on a Ronan SA-1 nuclear gauge containing a 2,000 millicurie cesium-137 source failed in the open position during preparations for a planned vessel entry. The gauge does not present an exposure hazard to the public or employees. Vessel entry was suspended pending repair or replacement of the gauge. On October 1, 2011, the manufacturer found that the gauge was operating as designed. The initial determination by the licensee that the shutter had not closed was based on an elevated dose rate reading taken after the shutter was closed. The investigation into the higher dose rate found that the reading had been compared to a reference reading made a distance further from the gauge. No repairs to the gauge were required. No violations were cited.

File closed.

Complaints Opened Fourth Quarter 2011

C - 2357 - Regulation Violations - Eternal Wellness Med Spa - McAllen, Texas

On October 5, 2011, the Agency received a complaint that a spa facility in McAllen, Texas, was not following the state regulations with its laser hair machine in that the keys were left in the machines at all times, the facility might not be properly registered with the Agency, and the persons performing procedures with laser and intense pulsed light machines are not properly trained and registered with the Agency under the laser hair removal rules. The Agency's investigation revealed that the keys were being left in the machines out of the necessity to keep them ready, but the registrant stated access was limited. Procedures were changed by the registrant to keep the door to the room housing laser and intense pulsed light devices locked when the technician is not present to prevent any unauthorized access and use of the devices. The investigation also revealed that the facility was registered with the Agency under 25 TAC 289.301 for laser/laser services since 2008, but they were not registered as required under 25 TAC 289.302 as a laser hair removal facility. Also, technicians at the facility who had been performing laser hair removal were not registered with the Agency as required. The complaint was substantiated. The facility was cited with one violation. The technicians at the facility were each cited with one violation.

File closed.

C - 2358 - Regulation Violations - Healthy Rejuvenation dba 360 Med Spa - Southlake, Texas

On October 11, 2011, the Agency received a complaint that a laser hair removal facility in Southlake, Texas, was not registered, the technicians at the facility were not certified, that they did not have supervision of a physician and the keys were left in the laser all the time. The facility provided documentation that the technicians did have certificates of registration with the Agency, that they had a contract with a physician as required, and the facility submitted applications for laser registration and registration as a laser hair removal facility with the Agency during the investigation. The allegation that the keys were left in the laser all the time could not be substantiated. One violation was cited.

File closed.

C - 2359 - Response To Public Concern - Desert Industrial X-ray - Abilene, Texas

On October 24, 2011, the Agency received a complaint from a member of the general public stating that they had overheard several conversations between two radiographers about their use of controlled substances. The radiographers were not on the job. The Agency contacted the manager of the radiography company and requested that they conduct an internal investigation. On November 3, 2011, the manager reported that one radiographer was fired for refusing to take a drug test and enroll in a rehabilitation program. The other radiographer was put on leave and will attend a rehabilitation program. He will then be assessed to see if he can recommence work and will be required to take drug test monthly for 6 months. The complaint was substantiated. No violations were cited.

File closed.

Complaints Opened Fourth Quarter 2011

C - 2360 - Laser Injury - Beautiful Solutions LLC - Cedar Park, Texas

On October 19, 2011, the Agency received a complaint from an individual alleging he/she had received an injury during a laser hair removal procedure as a result of the laser being passed over the complainant's tattoo. The Agency conducted an investigation and determined that there had been no violation of the laser hair removal rules and regulations. The complaint could not be substantiated. No violations were cited.

File closed.

C - 2361 - Regulation Violations - TECHCORR USA LLC - Karnes County, Texas

On October 31, 2011, the Agency received a complaint that on October 26, 2011, alleging that a radiography truck was observed being driven erratically near Kenedy, Texas, and the truck was not properly marked with company information on the exterior of the truck as required by regulations. The Agency's investigation revealed that the truck was not being used for radiographic operations as the complainant thought. The complaint was not substantiated. No violations cited.

File closed.

C - 2362 - Regulation Violations - ARENDS Inspection, LLC - Houston, Texas

On November 7, 2011, the Agency received a complaint that the licensee was allowing radiographer trainees to work by themselves without the required supervision and that the licensee was not in compliance with several instances of required documentation and surveys. An investigation into this complaint is ongoing.

File open.

C - 2363 - Laser Injury - Clearstone Spa - Houston, Texas

On November 4, 2011, the Agency received a complaint from a lawyer for a client reporting burns and permanent scarring from a laser hair removal procedure. Medical records were submitted documenting the burn. An Agency investigation for Complaint 2286 on December 14, 2011, for an unrelated injury at the spa, had already uncovered this incident. Two violations were cited from the previous complaint, one relating to this injury. No additional violations were cited.

File closed.

Complaints Opened Fourth Quarter 2011

C - 2364 - Regulation Violations - Texas A&M University, College Station, Texas

On November 7, 2011, the Agency received a complaint that keys to the cyclotron building at a university had been missing since January 2011 and the building locks had not been re-keyed, thus creating a breach in the security of the cyclotron. An investigation into this complaint is ongoing.

File open.

C - 2365 – Unregistered Use of X-ray Machine - Troy Jewell - Bandera, Texas

On November 10, 2011, the Agency received a complaint alleging that a farrier in Bandera, Texas, was using an x-ray device on animals without the proper authorization or registration. The complaint was also sent to the Texas State Board of Veterinary Medical Examiners. An on-site, joint investigation was conducted by the two agencies. The investigation revealed that the farrier purchased and used an x-ray device on horses' feet and had not registered with the Agency. Following the on-site investigation, the farrier began the process to become properly registered with the Agency. The complaint was substantiated. One violation was cited.

File closed.

C - 2366 - * - University Health System - San Antonio, Texas

* Health and Safety Code Chapter 241.051(d)

No violations were cited.

File closed.

C - 2367 - Regulatory Violations - Eagle X-ray Inc. - Mont Belvieu, Texas

On November 30, 2011, the Agency received an allegation that a radiography field team for the licensee was not establishing two millirem per hour boundaries and that the radiography source was left unattended on occasion. On December 15, 2011, the Agency coordinated with the company at the alleged site to observe the licensee conduct radiography operations. The team observed was a different radiography team from the same licensee. The team did not use radiation safety equipment or procedures while conducting three shots on a weld: they left the survey meter turned off in the truck; they did not wear pocket dosimeters or electronic alarming dosimeters; they did not establish required boundaries; and, they did not conduct any of the required surveys. The trainer admitted to forging radiation survey logs. The Agency directed the team to stop work and to report to the RSO. The radiographers were removed from any further work by the RSO. The licensee will conduct training with all of its radiographers about the incident and radiation safety. The complaint was substantiated. Ten violations were cited.

File closed.

Complaints Opened Fourth Quarter 2011

C - 2368 - No Radiation Safety Officer - Open MRI and Digital Imaging, LLC - Spring, Texas

On December 2, 2011, the Agency received a phone call from an individual who alleged that the Radiation Safety Officer (RSO) on a facility's registration left the facility about two years ago and has not been replaced. The investigation into this event is ongoing.

File open.

C - 2369 - Radiation Exposure to Member of the General Public - IOFINA - Godley, Texas

On December 5, 2011, the Agency received a complaint alleging that workers at an iodine extraction operation may be being exposed to high levels of radiation. An on-site investigation was conducted by the Agency at the facility on January 5, 2012. Radiation dose rates were found to be above normal, and the radionuclide in each case was identified as radium-226, a naturally occurring radioactive material. Based on the dose rates measured and the time spent by the workers in areas where dose rates were elevated, no worker would exceed radiation dose limits for members of the general public. The facility manager stated that he had never had a sample reading 300 rem. He stated that one component read 300 microrem once. Both workers interviewed stated that they were not aware of any issues with radiation levels and had never been told to stay away from any component or trash bin due to radiation levels. The complaint could not be substantiated. No violations were cited.

File closed.

C - 2370 - Unregistered Laser Hair Removal Facility - B Gorgeous 24-7 - Austin, TX

On December 7, 2011, information that there was an unregistered laser hair facility was forwarded to the Agency's Incident Investigations Program from one of the Agency's inspection groups. An investigation into this complaint is ongoing.

File open.

C - 2371 - Regulatory Violations - LML Engineering -Arlington, Texas

On December 13, 2011, the Agency received a complaint alleging that a licensee who vacated a licensed site may have stored multiple moisture density gauges at his home until he leased a new office space. The licensee responded to a call from the agency and stated he had a new facility but had not had the facility listed on his license. The licensee submitted a copy of a lease showing that he had a new facility when he moved out the licensed facility. He did submit paperwork after the fact to the agency for a change of his storage location. There is no proof he stored the gauges at home. The complaint could not be substantiated. No violations were cited.

File closed.

Complaints Opened Fourth Quarter 2011

C - 2372 – Inadequate Credentialing – Texas Oncology PA – Tyler, Texas

On December 14, 2011, the Agency received a complaint referred by the Nuclear Regulatory Commission that a medical physicist at a cancer treatment center in Tyler, Texas, was not adequately credentialed and lacked training and sub-specialty certification. The complainant also alleged that the individual had operated a machine that was not properly calibrated and, coupled with the lack of training, had resulted in dose errors to patients. The complainant further alleged that the individual was aware of the errors and had made a statement to staff not to notify a patient of the error in treatment. An investigation into this complaint is ongoing.

File open.

C - 2373 - Regulation Violations - METCO - Buna, Texas

On December 14, 2011, the Agency received a complaint referred by the Nuclear Regulatory Commission that employees of an industrial radiography company were ignoring radiation safety regulations. The complainant alleged that radiographers were not wearing required film badges, were not responding to dose rate alarms, were not using survey meters, were leaving the radioactive source unattended, were allowing unauthorized persons to regularly cross radiation boundaries, and that the Radiation Safety Officer is aware of these violations and is covering them up. An investigation into this complaint is ongoing.

File open.

C - 2374 - Improper Disposal - Keene Sanitation Company - Keene, Texas

On December 20, 2011, the Environmental Protection Agency referred a complaint to the Agency in which a complainant alleged that a sanitation company had improperly disposed of a dumpster that was contaminated with radioactive material by cutting the dumpster up and burying it on the company's property. On January 5, 2012, the Agency conducted an on-site investigation and surveyed the property for radioactive material. No radioactive material was found. The complaint could not be substantiated. No violations were cited.

File closed.

Complaints Opened in a Previous Quarter and Closed in Fourth Quarter 2011

C - 2308 - Unregistered Laser - Shiller Surgery Center Inc. - Palestine, Texas.

On February 2, 2011 an Agency inspector discovered that a registrant was in possession of and using a Class IV laser without a current registration. The Agency's investigation revealed that the registrant had requested in writing that the Agency terminate its laser registration in December 2007 and the registrant continued to possess and use the laser until March 2010. From March 2010 until the registrant applied for a new registration in February 2011, the registrant possessed but did not use the laser. The complaint was substantiated. One violation was cited.

File closed.

C - 2339 - Regulation Violations - Affordable Laser Centers, LLC - Pasadena, Texas

On June 3, 2011, the Agency received an anonymous complaint alleging that the registrant had committed regulation violations of inappropriate advertising in declaring permanent laser hair removal, that the required Notice to Workers had not been provided, keys were left in the machines at all times, protective eyewear is old and inadequate, required warning posters are not available at all treatment areas, and client records are not adequately maintained. During the Agency's investigation, the registrant submitted copies of documents and photographs in response to the Agency's inquiries concerning the allegations. The registrant admitted that at the end of 2010 they had used the flyer with the verbiage "permanent hair removal", which is prohibited, but assured the Agency investigator they would not use it again. The remaining allegations could not be substantiated. The investigation revealed the facility had not submitted an application for a certificate of registration as a laser hair facility by the implementation date set by the Agency. One violation was cited.

File closed.

C - 2343 - Uncredentialed Technologists - Texas Managed Inc dba Texas Urgent Care - Houston, Texas

On June 21, 2011, the Agency received an anonymous allegation stating that the registrant was using unlicensed technologists to perform x-rays and that the registrant was not monitoring occupational dose to their workers. The Agency conducted an investigation of the allegations in conjunction with the registrant's routine inspection. The inspector was able to verify that the two staff members who take x-rays at the facility both have current limited medical radiologic technologist (LMRT) credentials. The inspector also found radiation dose monitoring has been conducted for the x-ray technologists and the area. The complaint could not be substantiated. No violations were cited.

File closed.

Complaints Opened in a Previous Quarter and Closed in Fourth Quarter 2011

C - 2346 - * - Brownwood Hospital LP dba Brownwood Regional Medical Center - Brownwood, Texas

* Health and Safety Code Chapter 241.051(d)

No violations were cited.

File closed.

C - 2350 - Uncredentialed X-ray Technologists - Varsha Shah - Lewisville, Texas

On August 11, 2011, the Agency received a complaint alleging the registrant was not providing personnel monitoring devices, was requiring non-credentialed individuals to take x-rays, and was not providing personnel protection devices to individuals in the room while x-rays are being performed. The Agency conducted an on-site investigation on October 5, 2011. The inspector was not able to substantiate the allegations. No violations were cited.

File closed.

C - 2352 - Injury from Intense Pulsed Light Device - NBH Lifetime Health, LLC - Austin, Texas

On August 19, 2011, the Agency received a complaint concerning a burn injury resulting from a procedure involving an intense pulsed light device. The alleged incident occurred in October 2010 at a facility in Austin, Texas. Several attempts to contact the facility were made, but the Agency did not receive a response. An on-site investigation was conducted by the Agency on November 10, 2011. The investigation found a class 4 laser was in use at the facility and the facility was not registered as required. The investigation was unable to substantiate that a reportable burn injury had occurred. One violation was cited.

File closed.

Complaints Opened in a Previous Quarter and Closed in Fourth Quarter 2011

C - 2353 - Unregistered Use of X-ray Machines - Texas Institute For Medical Education - Plano, Texas

On August 30, 2011, the Agency received a report that a training facility was using a C-arm device and was not registered with this Agency. Several attempts were made by the Agency to inspect the location, but the facility was closed each time. Attempts were made to contact the individual listed on the door, but received no response. On December 7, 2011, the Agency was able to contact the parent company in California and received a response from the Business Development Officer. He stated that they did not provide the C-arm device nor any training for it, they only lease out the space. The complaint could not be substantiated. No violations were cited.

File closed.

C - 2356 - Unregistered Laser Hair Facility - Round Rock Medical Aesthetics - Round Rock, Texas

On September 29, 2011, the Agency received a complaint alleging a company was using a laser for hair removal without being registered with this Agency. A review of Agency records found that the entity was registered with the Agency under the original laser rules and had applied for registration under the hair removal section of the rules in June 2011. No violations were cited.

File closed.